Page: 1

#### Raw Sequence Listing

02/02/93 09:11:54 S381.raw

3 4 (1) GENERAL INFORMATION: 5 6 (i) APPLICANT: R. Bruce Wall 7 8 (ii) TITLE OF INVENTION: Liga	ace tion Amplification of eic Acid Sequences
6 (i) APPLICANT: R. Bruce Wall	tion Amplification of
9 Nucl	
10 11 (iii) NUMBER OF SEQUENCES: 15 12	
13 (iv) CORRESPONDENCE ADDRESS:	
15 (A) ADDRESSEE: City of 16	Норе
17 (B) STREET: 1500 East D 18	uarte Road
19 (C) CITY: Duarte 20	
21 (D) STATE: California 22	
23 (E) COUNTRY: United Sta 24	tes of America
25 (F) ZIP: 91010-0269 26	
27 (v) COMPUTER READABLE FORM: 28	
	ble Density 5 1/4" diskette
31 (B) COMPUTER: Wang PC 32	
	S-DOS (R) Version 3.30
35 (D) SOFTWARE: Microsoft 36	(R)
37 (vi) CURRENT APPLICATION DATA: 38	
39 (A) APPLICATION NUMBER:	US/07/996,771
41 (B) FILING DATE: 24 DEC 42	1992
43 (C) CLASSIFICATION: 435	
45 (vii) PRIOR APPLICATION DATA: 46	
47 (A) APPLICATION NUMBER:	US/07/870,221
• • •	il 1992
50 51 (C) CLASSIFICATION: Unk	nown

Page: 2

#### Raw Sequence Listing

02/02/93 09:11:55 S381.raw

53	
54	(D) APPLICATION NUMBER: US/07/178,377
55	
56	(B) FILING DATE: 06 April 1988
57	
58	(C) CLASSIFICATION: Unknown
59	(-:::: AMMODNEY / ACRYM THEODY AMTON.
60	(viii) ATTORNEY/AGENT INFORMATION:
61	(A) MANTE Tools Edward C
62 63	(A) NAME: Irons, Edward S.
64	(B) REGISTRATION NUMBER: 16,541
65	(B) REGISTRATION NUMBER: 10,341
66	(C) REFERENCE/DOCKET NUMBER: None
67	(C) REFERENCE/DOCKET NOMBER. NOME
68	(ix) TELECOMMUNICATION INFORMATION:
69	(IX) IEEECOMMONICATION INFORMATION.
70	(A) TELEPHONE: (202) 785-6938
71	(A) IBBBI NOND: (202) 703 0730
72	(B) TELEFAX: (202) 785-5351
73	(3) 132211111 (202) 100 5001
74	(C) TELEX: 440087 LM WSH
75	(0) 1222111 110007 211 11011
76	
77	(2) INFORMATION FOR SEQ ID NO: 1:
78	(-,
79	(i) SEQUENCE CHARACTERISTICS:
80	, , -
81	(A) LENGTH: 14
82	
83	(B) TYPE: nucleic acid
84	
85	(C) STRANDEDNESS: Single Stranded
86	•
87	(D) TOPOLOGY: Linear
88	
89	(ii) MOLECULE TYPE: Not Applicable
90	
91	(iii) HYPOTHETICAL: Not Applicable
92	
93	(iv) ANTI-SENSE: Not Applicable
94	
95	(v) FRAGMENT TYPE: Not Applicable
96	
97	(vi) ORIGINAL SOURCE: Synthetically Prepared
98	A LLA TIMERTARE CONTROL OF LAND A
99	(vii) IMMEDIATE SOURCE: Synthetically Prepare
100	( DOCTOTON IN OPPOSE. No.
101	(viii) POSITION IN GENOME: None
102	(in) EDATIDE None
103	(ix) FEATURE: None

Page: 3

#### Raw Sequence Listing

02/02/93 09:11:58 S381.raw

105 (x) PUBLICATION INFORMATION: None
106
107 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
108
109 CGGCAGACTT CTCC 14
110
111
112
113 (2) INFORMATION FOR SEQ ID NO: 2:
114
115 (i) SEQUENCE CHARACTERISTICS:
116
117 (A) LENGTH: 8
118
119 (B) TYPE: nucleic acid
120
121 (C) STRANDEDNESS: Single Stranded
122
123 (D) TOPOLOGY: Linear
124
125 (ii) MOLECULE TYPE: Not Applicable
126
127 (iii) HYPOTHETICAL: Not Applicable
128
129 (iv) ANTI-SENSE: Not Applicable
130
131 (v) FRAGMENT TYPE: Not Applicable
132
133 (vi) ORIGINAL SOURCE: Synthetically Prepared
134
135 (vii) IMMEDIATE SOURCE: Synthetically Prepared
136 137 (viii) POSITION IN GENOME: None
(·, · · · · · · · · · · · · · · · · ·
138 139 (ix) FEATURE: None
139 (ix) FEATURE: None 140
141 (x) PUBLICATION INFORMATION: None 142
143 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2: 144
145 TCAGGAGT 8
146
147
148
149 (2) INFORMATION FOR SEQ ID NO:3:
150
151 (i) SEQUENCE CHARACTERISTICS:
152
153 (A) LENGTH: 6
154
155 (B) TYPE: nucleic acid
156

# Raw Sequence Listing

02/02/93 09:12:00 S381.raw

157		(C) STRANDEDNESS: Single Stranded
158		
159		(D) TOPOLOGY: Linear
160		
161	(ii)	MOLECULE TYPE: Not Applicable
162		
163	(iii)	HYPOTHETICAL: Not Applicable
164	, ,	**
165	(iv)	ANTI-SENSE: Not Applicable
166	<b>\-</b> '	
167	(v)	FRAGMENT TYPE: Not Applicable
168	( ' '	I I I I I I I I I I I I I I I I I I I
169	/mi\	ORIGINAL SOURCE: Synthetically Prepared
170	(*1)	ORIGINAL SOURCE: Synchecically Prepared
		TWOTTIME COURSE. Continuing to the Continuing to
171	(V11)	IMMEDIATE SOURCE: Synthetically Prepared
172		
173	(viii)	POSITION IN GENOME: None
174		
175	(ix)	FEATURE: None
176		
177	(x)	PUBLICATION INFORMATION: None
178		
179	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 3:
180		
181		TCAGGA 6
182		
183	(2) INFORM	ATION FOR SEQ ID NO:4:
184	(-,	
185	(i)	SEQUENCE CHARACTERISTICS:
186	(-)	
187		(A) LENGTH: 8
188		(A) DENGIN: 0
189		(B) Mype, muslois asid
		(B) TYPE: nucleic acid
190		
191		(C) STRANDEDNESS: Single Stranded
192		
193		(D) TOPOLOGY: Linear
194		
195	(ii)	MOLECULE TYPE: Not Applicable
196		
197	(iii)	HYPOTHETICAL: Not Applicable
198	, ,	
199	(iv)	ANTI-SENSE: Not Applicable
200	, ,	
201	(v)	FRAGMENT TYPE: Not Applicable
202	( ' /	
203	/vi\	ORIGINAL SOURCE: Synthetically Prepared
204	(++)	
205	/****	IMMEDIATE SOURCE: Synthetically Prepared
206	(ATT)	TREEDINIE GOORGE. Synchecically riepared
207	/111	DOCUMENT IN CENOME. None
207	(A111)	POSITION IN GENOME: None

209	(ix) FEATURE: None
210	(a) DUDITAL MICH. TUDADUS MICH.
211	(x) PUBLICATION INFORMATION: None
212	
213	
214	
215	
216	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
217	_
218	ACAGGAGT 8
219	
220	
221	
222	(2) INFORMATION FOR SEQ ID NO:5:
223	
224	(i) SEQUENCE CHARACTERISTICS:
225	
226	(A) LENGTH: 6
227	
228	(B) TYPE: nucleic acid
229	
230	(C) STRANDEDNESS: Single Stranded
231	
232	(D) TOPOLOGY: Linear
233	
234	(ii) MOLECULE TYPE: Not Applicable
235	
236	(iii) HYPOTHETICAL: Not Applicable
237	
238	(iv) ANTI-SENSE: Not Applicable
239	
240	(v) FRAGMENT TYPE: Not Applicable
241	
242	(vi) ORIGINAL SOURCE: Synthetically Prepared
243	
244	(vii) IMMEDIATE SOURCE: Synthetically Prepared
245	
246	(viii) POSITION IN GENOME: None
247	
248	(ix) FEATURE: None
249	
250	(x) PUBLICATION INFORMATION: None
251	
252	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
253	
254	ACAGGA 6
255	
256	
257	
258	(2) INFORMATION FOR SEQ ID NO:6:
259	
260	(i) SEQUENCE CHARACTERISTICS:
	· · ·

(A) LENGTH: 14
(B) TYPE: nucleic acid
(-,
(C) STRANDEDNESS: Single Stranded
(o) bridgibbbilbbi briigic berailded
(D) TOPOLOGY: Linear
(b) TOPOLOGI: Linear
(ii) NOT BOUT B. MUDD. Not benlinelin
(ii) MOLECULE TYPE: Not Applicable
(111) mrnommont - Mak 2 - 21 - 21 -
(iii) HYPOTHETICAL: Not Applicable
(iv) ANTI-SENSE: Not Applicable
(v) FRAGMENT TYPE: Not Applicable
<pre>(vi) ORIGINAL SOURCE: Synthetically Prepared</pre>
(vii) IMMEDIATE SOURCE: Synthetically Prepared
(viii) POSITION IN GENOME: None
(ix) FEATURE: None
,
(x) PUBLICATION INFORMATION: None
, ,
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
· , -
CACCTGACTC CTGA 14
(2) INFORMATION FOR SEQ ID NO:7:
(2) INFORMATION FOR SEQ ID NO: /:
(i) CEQUENCE CUADACMENTEMICS.
(i) SEQUENCE CHARACTERISTICS:
ARA TOMORES 14
(A) LENGTH: 14
(B) TYPE: nucleic acid
(C) STRANDEDNESS: Single Stranded
(D) TOPOLOGY: Linear
(ii) MOLECULE TYPE: Not Applicable
(iii) HYPOTHETICAL: Not Applicable
(iv) ANTI-SENSE: Not Applicabl
•••

313	
314	(vi) ORIGINAL SOURCE: Synthetically Prepared
315	(will INVENTAGE COURSE. Combbatically Decision
316	(vii) IMMEDIATE SOURCE: Synthetically Prepared
317	(-iii) DOCIMION IN CENOVE. None
318	(viii) POSITION IN GENOME: None
319	(in) REPRIDE. None
320 321	(ix) FEATURE: None
321	(x) PUBLICATION INFORMATION: None
323	(x) FUBBICATION INFORMATION: None
324	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
325	(iii) bagaanaa babanaa aa
326	CACCTGACTC CTGT 14
327	
328	
329	
330	(2) INFORMATION FOR SEQ ID NO:8:
331	_
332	(i) SEQUENCE CHARACTERISTICS:
333	· · · <u>-</u>
334	(A) LENGTH: 8
335	
336	(B) TYPE: nucleic acid
337	
338	(C) STRANDEDNESS: Single Stranded
339	
340	(D) TOPOLOGY: Linear
341	
342	(ii) MOLECULE TYPE: Not Applicable
343	
344	(iii) HYPOTHETICAL: Not Applicable
345	
346	(iv) ANTI-SENSE: Not Applicable
347	
348	(v) FRAGMENT TYPE: Not Applicable
349	
350	(vi) ORIGINAL SOURCE: Synthetically Prepared
351	/ // TINTER COMPANY OF THE LOCAL PROPERTY OF THE PROPERTY OF T
352	(vii) IMMEDIATE SOURCE: Synthetically Prepared
353	(will postator to savora. News
354 355	(viii) POSITION IN GENOME: None
356	(ix) FEATURE: None
357	(IX) FERIORE: None
35 <i>7</i> 358	(x) PUBLICATION INFORMATION: None
359	(x) PUBLICATION INFORMATION: None
360	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
361	(VI) REPORTED RESCRIPTION: SEG ID NO: 9:
362	GGAGAAGT 8
363	onomo:
364	

365			
366	(2)	INFORMA	TION FOR SEQ ID NO:9:
367			
368		(i)	SEQUENCE CHARACTERISTICS:
369			
370			(A) LENGTH: 6
371			
372			(B) TYPE: nucleic acid
373			
374			(C) STRANDEDNESS: Single Stranded
375			
376			(D) TOPOLOGY: Linear
377			
378		(ii)	MOLECULE TYPE: Not Applicable
379			
380		(iii)	HYPOTHETICAL: Not Applicable
381			
382		(iv)	ANTI-SENSE: Not Applicable
383			•
384		- (V)	FRAGMENT TYPE: Not Applicable
385			
386		(Vi)	ORIGINAL SOURCE: Synthetically Prepared
387			
388		(vii)	IMMEDIATE SOURCE: Synthetically Prepared
389			
390		(viii)	POSITION IN GENOME: None
391			
392		(ix)	FEATURE: None
393			
394		(x)	PUBLICATION INFORMATION: None
395			
396		(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 9:
397			
398			GGAGAA 6
399			
400			
401			
402	(2)	INFORMA	TION FOR SEQ ID NO:10:
403			
404		(i)	SEQUENCE CHARACTERISTICS:
405			
406			(A) LENGTH: 19
407			
408			(B) TYPE: nucleic acid
409			
410			(C) STRANDEDNESS: Single Stranded
411			
412			(D) TOPOLOGY: Linear
413			1
414		(ii)	MOLECULE TYPE: Not Applicable
415			<del></del>
416		(iii)	HYPOTHETICAL: Not Applicable

(iv) ANTI-SENSE: Not Applicable
(v) FRAGMENT TYPE: Not Applicable
(vi) ORIGINAL SOURCE: Synthetically Prepared
(vii) IMMEDIATE SOURCE: Synthetically Prepared
(viii) POSITION IN GENOME: None
(ix) FEATURE: None
( ) BURLIANTAN TURARUS MIANA
(x) PUBLICATION INFORMATION: None
(-/) GROUPING BEGGRERATON, GRO TR NO. 10.
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
emacmas ass assamana 10
CTCCTGAGGA GAAGTCTGC 19
(A) TUROPULATON POR ORO TO NO.11.
(2) INFORMATION FOR SEQ ID NO:11:
// GEOMENCE CHARACTERICS.
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 19
(A) LENGTH: 19
(B) TYPE: nucleic acid
(b) TIPE: nucleic acid
(C) STRANDEDNESS: Single Stranded
(o) bilanbiblibib. biligic belanded
(D) TOPOLOGY: Linear
(b) for obodi. Bincar
(ii) MOLECULE TYPE: Not Applicable
(II) MODECOBE IIIB. NOT Applicable
(iii) HYPOTHETICAL: Not Applicable
(III) miloimbilomb. Not applicable
(iv) ANTI-SENSE: Not Applicable
(11) Intl obtobe not applicable
(v) FRAGMENT TYPE: Not Applicable
(V) Italiani IIII noo lippiioani
(vi) ORIGINAL SOURCE: Synthetically Prepared
(vi) onicial booksi binoncolouli lispals
(vii) IMMEDIATE SOURCE: Synthetically Prepared
() simmenian notions of noncontain the partou
(viii) POSITION IN GENOME: None
\
(ix) FEATURE: None
(
(x) PUBLICATION INFORMATION: None
\\

469		(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 11:
470			
471			CTCCTGTGGA GAAGTCTGC 19
472			
473			
474			
475	(2)	INFORM	ATION FOR SEQ ID NO:12:
476			
477		(i)	SEQUENCE CHARACTERISTICS:
478			
479			(A) LENGTH: 23
480			
481			(B) TYPE: nucleic acid
482			
483			(C) STRANDEDNESS: Single Stranded
484			
485			(D) TOPOLOGY: Linear
486			
487		(ii)	MOLECULE TYPE: Not Applicable
488		•	
489		(iii)	HYPOTHETICAL: Not Applicable
490		,	••
491		(iv)	ANTI-SENSE: Not Applicable
492		•	
493		(V)	FRAGMENT TYPE: Not Applicable
494		` '	••
495		(vi)	ORIGINAL SOURCE: Synthetically Prepared
496		( - /	
497		(vii)	IMMEDIATE SOURCE: Synthetically Prepared
498		( /	
499		(viii)	POSITION IN GENOME: None
500		<b>, ,</b>	
501		(ix)	FEATURE: None
502		( === ,	
503		(x)	PUBLICATION INFORMATION: None
504			
505		(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 12:
506		(/	
507			CGGCAGACTT CTCCTCAGGA GTC 23
508			
509			
510			
511	(2)	TNFORM	ATION FOR SEQ ID NO:13:
512	(-,	1111 0141	illow for one in the first
513		(3)	SEQUENCE CHARACTERISTICS:
514		(-)	anguana diministration.
515			(A) LENGTH: 23
516			(ii) DENGIII. 23
517			(B) TYPE: nucleic acid
518			(2) IIII. Hadioto dota
519			(C) STRANDEDNESS: Single Stranded
520			(0) DIMMUDDIEDD. BINGTE BELANGE
J20			

521		(D) TOPOLOGY: Linear
522	(11)	MOLEGIE MUDE. Not Book took to
523	(11)	MOLECULE TYPE: Not Applicable
524	12121	HYPOTHETICAL: Not Applicable
525	(111)	HIPOTHETICAL: Not Applicable
526	4.1	numr onum. Web hamiltoning
527	(1V)	ANTI-SENSE: Not Applicable
528		
529	(V)	FRAGMENT TYPE: Not Applicable
530		
531	(vi)	ORIGINAL SOURCE: Synthetically Prepared
532		
533	(vii)	IMMEDIATE SOURCE: Synthetically Prepared
534		
535	(viii)	POSITION IN GENOME: None
536		
537	(ix)	FEATURE: None
538		
539	(x)	PUBLICATION INFORMATION: None
540		
541	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 13:
542		
543		CGGCAGACTT CTCCACAGGA GTC 23
544		
545		
546		
547	(2) INFORM	ATION FOR SEQ ID NO:14:
548	, ,	_
549	(i)	SEQUENCE CHARACTERISTICS:
550	, ,	<del>-</del>
551		(A) LENGTH: 14
552		
553		(B) TYPE: nucleic acid
554		
555		(C) STRANDEDNESS: Single Stranded
556		(1)
557		(D) TOPOLOGY: Linear
558		(5) 10101011 1111011
559	(11)	MOLECULE TYPE: Not Applicable
560	(/	andpp220an20
561	(1111)	HYPOTHETICAL: Not Applicable
562	(111)	
563	/iv\	ANTI-SENSE: Not Applicable
564	(,	mil banda. Not applicable
565	/ 77 \	FRAGMENT TYPE: Not Applicable
566	(4)	truotmut iiin. not ubbitcanie
567	/! \	ODICINAL COURCE. Combbotically Decreed
568	(A1)	ORIGINAL SOURCE: Synthetically Prepared
569	/1 1 N	IMMEDIATE SOURCE: Synthetically Prepared
570	(A11)	THEREDIALE SOURCE: SYNCHECICALLY Prepared
571	(111)	POSITION IN GENOME: None
572	(ATTT)	POSITION IN GENOME: None
J 1 Z		

573 (ix) FEATURE: None 574
575 (x) PUBLICATION INFORMATION: None
576
577 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
578
579 CCTCTTCAGA CGGC 14
580
581
582
583 (2) INFORMATION FOR SEQ ID NO:15:
584
585 (i) SEQUENCE CHARACTERISTICS:
586
587 (A) LENGTH: 8
588
589 (B) TYPE: nucleic acid
590
591 (C) STRANDEDNESS: Single Stranded
592
593 (D) TOPOLOGY: Linear
594
595 (ii) MOLECULE TYPE: Not Applicable
596
597 (iii) HYPOTHETICAL: Not Applicable
598
599 (iv) ANTI-SENSE: Not Applicable 600
601 (v) FRAGMENT TYPE: Not Applicable
602
603 (vi) ORIGINAL SOURCE: Synthetically Prepared
604
605 (vii) IMMEDIATE SOURCE: Synthetically Prepared
606
607 (viii) POSITION IN GENOME: None
608
609 (ix) FEATURE: None
610
611 (x) PUBLICATION INFORMATION: None
612
613 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
614
615 TGAGGACT 8
616

PAGE:

1

SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/07/996,771

DATE: 02/02/93 TIME: 09:13:05

S381

LINE ERROR

ORIGINAL TEXT

51 Unknown or Misplaced Identifier (C 58 Unknown or Misplaced Identifier (C

(C) CLASSIFICATION: Unknown (C) CLASSIFICATION: Unknown

PAGE: 1 SEQUENCE MISSING ITEM REPORT PATENT APPLICATION US/07/996,771

MANDATORY IDENTIFIER THAT WAS NOT FOUND

DATE: 02/02/93 TIME: 09:13:05 S381

PAGE: 1

SEQUENCE CORRECTION REPORT PATENT APPLICATION US/07/996,771

DATE: 02/02/93 TIME: 09:13:05 S381

LINE ORIGINAL TEXT

CORRECTED TEXT